

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Original): An elevator rail joint detecting device characterized by comprising:

a joint detecting portion opposed to a guide rail, which has a plurality of unit rails vertically connected to each other, and provided to a car guided by the guide rail, for detecting presence of a joint between each of the unit rails; and

a joint determining portion for determining presence/absence of the joint based on information from the joint detecting portion.

Claim 2 (Currently Amended): An elevator rail joint detecting device according to Claim 1, ~~characterized in that~~ wherein:

the joint detecting portion has a light projecting portion for irradiating a light beam to a surface of the guide rail, and a light receiving portion for receiving a part of a reflected light beam of the light beam irradiated to the joint, the light receiving portion being placed to avoid interference with an optical path of a reflected light beam of the light beam as specularly reflected by the surface of the guide rail; and

the joint determining portion determines the presence/absence of the joint based on information on an amount of light received by the light receiving portion.

Claim 3 (Currently Amended): An elevator rail joint detecting device according to Claim 1, ~~characterized in that~~ wherein:

the joint detecting portion has: a light irradiating portion for irradiating a plurality of light beams to a surface of the guide rail; a plurality of light receiving portions, each for

receiving a part of a reflected light beam of each of the light beams irradiated to the joint, the plurality of light receiving portions each being placed to avoid interference with an optical path of a reflected light beam of each of the light beams as specularly reflected by the guide rail; and an imaging optical system for imaging each of the reflected light beams to each of the light receiving portions; and

the joint determining portion determines the presence/absence of the joint based on information on an amount of light received by each of the light receiving portions.

Claim 4 (Currently Amended): An elevator rail joint detecting device according to Claim 2 ~~or 3, characterized in that~~ wherein the light projecting portion irradiates the light beam in a direction perpendicular to the surface of the guide rail.

Claim 5 (Currently Amended): An elevator rail joint detecting device according to Claim 2 ~~or 3, characterized in that~~ wherein:

a polarization direction of the light beam irradiated from the light projecting portion is P-polarization; and

an incident angle of the light beam on the surface of the guide rail is a Brewster angle.

Claim 6 (Original): An elevator apparatus characterized by comprising:

a guide rail having a plurality of unit rails that are vertically connected to each other;

a car guided by the guide rail;

a rail joint detecting device having: a joint detecting portion opposed to the guide rail and provided to the car, for detecting presence of a joint between each of the unit rails; and a joint determining portion for determining presence/absence of the joint based on information from the joint detecting portion;

a car position detecting portion for detecting a position of the car;

a car position correcting portion for correcting information on the position of the car from the car position detecting portion based on information from the joint determining portion; and

a control device for controlling operation of an elevator based on information on the position of the car from the car position correcting portion.

Claim 7 (New): An elevator rail joint detecting device according to Claim 3, wherein the light projecting portion irradiates the light beam in a direction perpendicular to the surface of the guide rail.

Claim 8 (New): An elevator rail joint detecting device according to Claim 3, wherein:
a polarization direction of the light beam irradiated from the light projecting portion is P-polarization; and

an incident angle of the light beam on the surface of the guide rail is a Brewster angle.